

Rosgen Classification:	Proposed C4 stream type classification
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Monitoring DATA collected by: M. Green and J. Young Date: 9/12/11

Name: NCDOT – Roadside Environmental Unit

Address: 1425 Rock Quarry Rd, Raleigh, NC 27610

Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov

Name:

Address:

Telephone Number: _____ Email address: _____

Project Status:

The permittee shall perform the following components of Level I monitoring each year for the 5-year monitoring period or through two documented bankfull flow events: Reference photos; plant survival (i.e. identify specific problem areas (missing, stressed, damaged or dead plantings), estimated causes, and proposed/required remedial action); visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. The permittee shall submit the monitoring reports to the USACE, Raleigh Regulatory Field Office Project Manager, within sixty days after completing the monitoring. If less than two bankfull events occur during the first 5 years, the permittee shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the five-year monitoring period, the USACE, in consultation with the resource agencies, may determine that further monitoring is not required. It is suggested that all bankfull occurrences be monitored and reported through the required monitoring period. The permittee shall perform and submit photo documentation twice each year (summer and winter) for the 5-year monitoring period, and for any subsequently required monitoring period.

(Monitoring at all levels must complete this section)

Dates reference photos have been taken at this site: 2/23/09, 9/1/09, 3/16/10, 9/28/10, 3/2/11, 9/12/11

Individual from whom additional photos can be obtained (name, address, phone):_____

Other Information relative to site photo reference: A site map with photo point locations is attached to this report.

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action:_____

ADDITIONAL COMMENTS: NCDOT replanted Type I and II plantings on March 2, 2011. The site was replanted with sycamore, river birch, and willow oak bareroot seedlings and black willow and silky dogwood live stakes. Planted vegetation noted surviving included silky dogwood, black willow, sycamore, river birch, and yellow poplar. Other vegetation noted included alder, briars, jewelweed, cottonwood, green ash, elderberry, red maple, sweetgum, lespedeza, and various grasses. Lespedeza is very thick throughout this site but some of the planted seedlings are surviving within the buffer area.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

UT to Dixon Branch (Site 19) stream relocation is stable for the Year 3 Summer evaluation, except for, some areas of bank scouring that were noted previously upstream of the pipe crossing at Sta. 10+80 Y-7 and Sta. 10+40 Y-7. NCDOT has installed live stakes along the streambank to help stabilize these areas of scouring behind these J-hooks. The areas of bank scouring show little or no changes since the last evaluation. The area downstream of the pipe that had extensive erosion was repaired during May 2010. Evidence of a bankfull event has been noted since last monitoring evaluation. NCDOT will continue to monitor channel stability at this stream relocation.

Date 9/12/11	Station 10+80 Y-7 (additional photo)	Station 10+40 Y-7 (additional photo)	Station	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?	Bank scouring on left bank behind J-hook	Bank scouring on left bank behind J-hook			
Other problems noted?					

Section 4. DEBIT LEDGER

The entire UT to Dixon Branch (Site 19) stream mitigation site was used for the R-2248D project to compensate for unavoidable stream impacts.

UT to Dixon Branch

Site 19



Photo Point #1 (Upstream)



Photo Point #1 (Downstream)



Photo Point #2 (Upstream)



Photo Point #2 (Downstream)



Photo Point #3 (Upstream)

Year 3 Summer – September 2011



Photo Point #3 (Downstream)

UT to Dixon Branch

Site 19



Photo Point #4 (Upstream)



Photo Point #4 (Downstream)



Left bank scouring at end of J-Hook @ Sta. 10+80 Y-7



Left bank scouring at end of J-Hook @ Sta. 10+40 Y-7

Year 3 Summer – September 2011

